



	P-1288 PATENT
IN THE UNITED STATE	S PATENT AND TRADEMARK OFFICE
Patent application	
of	
01	Inventor(s)
for	
	Title of invention
	OR
In re application of: Nusp1, et a	1.
Application No.: 0 10 / 578032	Group Art Unit:
Filed: May 2, 2006	Examiner:
For: LITHIUM METAL PHOSPHATE	S. METHOD FOR PRODUCING THE
SAME AND USE THEREOF AS Mail Stop Amendment	ELECTRODE MATERIAL
Commissioner for Patents	
P.O. Box 1450	•
Alexandria, VA 22313-1450	
WITHIN THRE	RMATION DISCLOSURE STATEMENT E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10*  the Express Mail label number is mandatory;
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express N	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10*  the Express Mail label number is mandatory;  Mail certification is optional.)
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.)  , this correspondence is being:
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express No. 1) I hereby certify that, on the date shown below,	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.) , this correspondence is being: MAILING
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express No. 1) I hereby certify that, on the date shown below,	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.) , this correspondence is being: MAILING
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.)  this correspondence is being:
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  IDER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; fail certification is optional.) , this correspondence is being: MAILING  vice in an envelope addressed to Commissioner for Patents, in
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  IDER 37 C.F.R. §§ 1.8(a) and 1.10*  the Express Mail label number is mandatory; Mail certification is optional.)  , this correspondence is being:  MAILING  vice in an envelope addressed to Commissioner for Patents, 1.37 C.F.R. § 1.10 *
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.) , this correspondence is being: MAILING  vice in an envelope addressed to Commissioner for Patents,  37 C.F.R. § 1.10 *
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.)  , this correspondence is being: MAILING  vice in an envelope addressed to Commissioner for Patents,  37 C.F.R. § 1.10 *  as "Express Mail Post Office to Addressee" Mailing Label No (mandat TRANSMISSION
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10*  the Express Mail label number is mandatory; Mail certification is optional.)  , this correspondence is being:  MAILING  vice in an envelope addressed to Commissioner for Patents,  37 C.F.R. § 1.10 *  as "Express Mail Post Office to Addressee"  Mailing Label No (mandat TRANSMISSION
WITHIN THRE BEFORE MAILING OF FIRS  CERTIFICATION UN (When using Express Mail, to Express Mail), to Express Mail, to Express	E MONTHS OF FILING OR ST OFFICE ACTION (37 C.F.R. § 1.97(b))  DER 37 C.F.R. §§ 1.8(a) and 1.10* the Express Mail label number is mandatory; Mail certification is optional.) , this correspondence is being:  MAILING  vice in an envelope addressed to Commissioner for Patents,  37 C.F.R. § 1.10 *  as "Express Mail Post Office to Addressee"  Mailing Label No

\* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

(type or print name of person certifying)

(Transmittal of Information Disclosure Statement Within Three Months of Filing or Before Mailing of First Office Action [6-3]-page 1 of 3) NOTE: 37 C.F.R. 1.98(b):

- (1) Each U.S. patent listed in an information disclosure statement must be identified by inventor, patent number, and issue date.
- (2) Each U.S. patent application publication listed in an information disclosure statement shall be identified by applicant, patent application publication number, and publication date.
- (3) Each U.S. application listed in an information disclosure statement must be identified by the inventor, application number, and filing date.
- (4) Each foreign patent or published foreign patent application listed in an information disclosure statement must be identified by the country or patent office which issued the patent or published the application, an appropriate document number, and the publication date indicated on the patent or published application.
- (5) Each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication.
- WARNING: No extension of time can be had under 37 C.F.R. § 1.136 (a) or (b) for filing an IDS. 37 C.F.R. § 1.97(f).
- NOTE: The "filing date of a national application" under 37 C.F.R. § 1.97(b) has two possible meanings. Where the filing is a direct one to the United States Patent & Trademark Office, the filing is defined in 37 C.F.R. § 1.53(b) as "the date on which: (1) A specification containing a description pursuant to § 1.71 and at least one claim pursuant to § 1.75; and (2) any drawing required by § 1.81(a), are filed in the Patent and Trademark Office in the name of the actual inventor or inventors as required by § 1.41." 37 C.F.R. § 1.97(b)(1). On the other hand, an international application that enters the national stage occurs when the applicant has filed the documents and fees required by 35 U.S.C. § 371(c) within the periods set forth in § 1.494 or § 1.495. 35 U.S.C. § 371(c) requires the filing of the following: (1) the basic national fee; (2) a copy of the international application, unless already sent by the International Bureau, and optionally an English translation if filed in another language; and, also optionally (3) amendments under PCT Article 19, with a translation into English if made in another language; (4) an oath or declaration; and (5) a translation into English of any annexes to the international preliminary examination report, if such annexes were made in another language. The optional items must be submitted later, with surcharges. 37 C.F.R. § 1.97(b)(2).

# IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. § 1.97(b).

- NOTE: "No certification or fee is due when the filing is made within the above time period. It is advisable to ensure that no Office action has been mailed if the disclosure statement is delayed until after three months from filing."
- NOTE: "An information disclosure statement will be considered to have been filed on the day it was received in the Office, or on an earlier date of a mailing if accompanied by a properly executed certificate of mailing under 37 C.F.R. 1.8, or Express Mail certificate under 37 C.F.R. 1.10. An Office action is mailed on the date indicated in the Office action." Notice of April 20, 1992 (1138 O.G. 37-41, 39). See also § 609, M.P.E.P., 8th Edition.
- NOTE: "The term 'national application' includes continuing applications (continuations, divisions, continuationsin-part) so three-months will be measured from the actual filing date of an application as opposed [sic] to the effective date of a continuing application." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

(Transmittal of Information Disclosure Statement Within Three Months of Filing or Before Mailing of First Office Action [6-3]—page 2 of 3) Reg. No.: 31,945

Customer No.:

Tel. No.: (502) 589-4215

NOTE: "An action on the merits means an action which treats the patentability of the claims in an application, as opposed to only formal or procedural requirements. An action on the merits would, for example, contain a rejection or indication of allowability of a claim or claims rather than just a restriction requirements (37 C.F.R. 1.142) or just a requirement for additional fees to have a claim considered (37 C.F.R. 1.16(d)). Thus, if an application was filed on Jan. 1 and the first Office action on the merits was not mailed until six months later on July 1, the examiner would be required to consider any proper information disclosure statement filed prior to July 1." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

WARNING: "A petition for suspension of action to allow applicant time to submit an information disclosure statement will be denied as failing to present good and sufficient reasons, since 37 C.F.R. § 1.97 provides adequate recourse for the timely submission of prior art for consideration by the examiner."

Notice of July 6, 1992 (1141 O.G. 63). But see § 103(b) and (c), limited suspension of action in a continued prosecution application (CPA) filed under § 1.53(d) and in a request for continued examination (RCE) under § 1.114.

SIGNATURE OF PRACTITIONER

Scott R. Cox

(type or print name of practitioner)

500 W. Jefferson St., Suite 2100

P.O. Address

Louisville, KY 40202

(Transmittal of Information Disclosure Statement Within Three Months of Filing or Before Mailing of First Office Action [6-3]—page 3 of 3)

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO **Application Number** 10/578032 Filing Date May 2, 2006 INFORMATION DISCLOSURE First Named Inventor Nuspl STATEMENT BY APPLICANT Art Unit (Use as many sheets as necessary) Examiner Name P-1288 Attorney Docket Number of 2 Sheet 1 **U. S. PATENT DOCUMENTS** Publication Date Name of Patentee or Pages, Columns, Lines, Where Examiner **Document Number** MM-DD-YYYY Applicant of Cited Document Relevant Passages or Relevant Initials\* No. Figures Appear Number-Kind Code<sup>2 (If known)</sup> <sup>US-</sup> 5,910,382 06-08-1999 Goodenough US-US- 2003/0124423 07-03-2003 Sasaki JUL 1 2 2006 US- 2004/0151649 08-05-2004 Hemmer <sup>US-</sup> 2004/0175614 09-09-2004 Wurm ARTS TRACT US-US-US-US-US-US-US-US-US-US-US-US-US-**FOREIGN PATENT DOCUMENTS** Name of Patentee or Cite No.1 Foreign Patent Document Pages, Columns, Lines, Examiner Date Applicant of Cited Document Where Relevant Passages Initials' T<sup>6</sup> MM-DD-YYYY Or Relevant Figures Appear Country Code3 Number 4 Kind Code5 (if known) EP 1 094 523 Matsushita Elec 04-25-2001 05-24-2002 JP 2002/151082 Abstract Kansa Res Inst Examiner Considered Signature

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031

Under the Paperwork Reduction Act of 1995, no persons an	e required to respond to a collection	Complete if Known	s control number.
Substitute for form 1449/PTO	Application Number	10/578032	
INFORMATION DISCLOSURE	Filing Date	May 2, 2006	
STATEMENT BY APPLICANT	First Named Inventor	Nupsl	
	Art Unit	<u> </u>	
(Use as many sheets as necessary)	Examiner Name		<del>! -</del>

Attorney Docket Number

P-1288

JUL 1 2 2006

2

2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		ARNOLD, G., et al., Fine-particle lithium iron phosphate LiFePO4 synthesized by a new low-cost aqueous precipitation technique, Journal of Power Sources 119-121 (2003), pp.247-251	
		CHUNG, S., et al., Electronically conductive phospho-olivines as lithium storage electrodes, Nature Materials, Vol. 1 (2002), pp. 123-128.	
		FRANGER, S., et al., Comparison between different LiFePO4 synthesis routes and their influence on its physico-chemical properties; Journal of Power Sources 119-121 (2003), pp.252-7.	
		PADHI, A.K., et al., Phospho-olivines as Positive-Electrode Materials for Rechargeable Lithium Batteries, J. Electrochem. Soc., Vol. 144 (1997), pp. 1188-1194.	
		RAVET, N., et al., Improved Iron Based Cathode Material, Abstract No. 127 (1999).	
		TAJIMI, S., et al., Enhanced electrochemical performance of LiFePO4 prepared by hydrothermal reaction, Solid State Ionics 175 (2004), pp. 287-290.	,
		YANG, S., et al., Hydrothermal synthesis of lithium iron phosphate cathodes, Electrochemistry Communications 3 (2001), pp. 505-508.	

Examiner	,	Date	
Signature		Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

onsidered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Nuspl, et al.

•

Serial No.: 10/578032

Examiner:

Art Unit:

Filing Date: May 2, 2006

:

Attorney Docket No.: P-1288

For: LITHIUM METAL PHOSPHATES,

METHOD FOR PRODUCING THE SAME : AND USE THEREOF AS ELECTRODE :

MATERIAL

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

## INFORMATION DISCLOSURE STATEMENT

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR \$1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such. In accordance with 37 CFR \$1.97(b), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR \$1.56(a) exists. This information is submitted in compliance with 37 CFR \$1.98.

# **U.S.** References:

5,910,382 2003/0124423

2004/151649 (Equivalent of WO 02/083555) 2004/175614 (Equivalent of WO 02/099913)

# Foreign References:

EP 1 094 523

JP 2002-151082 Abstract

## Non Patent Literature Documents:

ARNOLD, G., et al., <u>Fine-particle lithium iron phosphate LiFePO4</u> synthesized by a new <u>low-cost aqueous precipitation technique</u>, Journal of Power Sources 119-121 (2003), pp. 247-251.

CHUNG, S., et al., <u>Electronically conductive phospho-olivines as lithium storage electrodes</u>, Nature Materials, Vol. 1 (2002), pp. 123-128.

FRANGER, S., et al., <u>Comparison between different LiFePO4 synthesis</u> routes and their influence on its physico-chemical properties, Journal of Power Sources 119-121 (2003), pp. 252-257.

PADHI, A.K., et al., <u>Phospho-olivines as Positive-Electrode</u> <u>Materials for Rechargeable Lithium Batteries</u>, J. Electrochem. Soc., Vol. 144 (1997), pp. 1188-1194.

RAVET, N., et al., <u>Improved Iron Based Cathode Material</u>, Abstract No. 127 (1999).

TAJIMI, S., et al., Enhanced electrochemical performance of LiFePO4 prepared by hydrothermal reaction, Solid State Ionics 175 (2004), pp. 287-290.

YANG, S., et al., <u>Hydrothermal synthesis of lithium iron phosphate</u> cathodes, Electrochemistry Communications 3 (2001), pp. 505-508.

Respectfully submitted,

Scott R. Cox

Reg. No. 31,945

LYNCH, COX, GILMAN & MAHAN, P.S.C. 500 W. Jefferson St., Suite 2100 Louisville, Kentucky 40202

## CERTIFICATE OF SERVICE

I hereby certify that this Information Disclosure Statement is being deposited with the United States Postal Service in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date: 1/10/2006

:JC

Attachments

R:\Patents\p1288\IDS.wpd